

**WHAT IS CLAIMED IS:**

1. A system for exchanging data and audio between a cellular telephone and a landline telephone, the system comprising:

a cordless telephone base station having a BLUETOOTH radio transceiver, and a cordless radio transceiver; and

a cordless handset having a cordless radio transceiver configured to communicate with the cordless telephone base station using cordless radio frequency communications, and

wherein the BLUETOOTH radio transceiver and the cordless radio transceiver of the cordless telephone base station are coupled so that the cordless handset can communicate with the cellular telephone.

2. The system of claim 1, wherein the cordless telephone base station includes a BLUETOOTH module including hardware and software used for the BLUETOOTH radio transceiver, and cordless protocol stack and transcoder coupled to the cordless radio transceiver.

3. The system of claim 2, wherein the BLUETOOTH module supports a headset profile so that the cordless telephone base station and the cellular telephone can communicate with each other by the headset profile.

4. The system of claim 2, wherein the BLUETOOTH module establishes an audio link for exchanging audio messages between the cordless telephone base station and the cellular telephone.

5. The system of claim 2, wherein the BLUETOOTH module establishes a data link for exchanging data between the cordless telephone base station and the cellular telephone.

6. The system of claim 1, wherein the cordless telephone base station communicates with the cellular telephone via a BLUETOOTH wireless communications technology when the cellular telephone is within a range of the Bluetooth transceiver of the cordless telephone base station.

7. A system for wireless communications between a cellular telephone and a landline telephone, the system comprising:

a telephone base station including a BLUETOOTH wireless transceiver and a cordless radio transceiver; and

one or more handsets configured to communicate with the telephone base station using radio frequency communications,

a cellular telephone that is BLUETOOTH-enabled so that when the cellular telephone is in a range of the BLUETOOTH wireless transceiver, a wireless communication is established between the cellular telephone and the telephone base station, and

wherein when the wireless communication is established, an audio link is established between the cellular telephone and the telephone base station by using a BLUETOOTH headset profile for exchanging audio packets when an audio exchange is required.

8. The system of claim 7, wherein a data link is established using an Asynchronous Connectionless Link (ACL) connection along with the audio link to support data exchange between the one or more cellular telephone and the telephone base station.

9. The system of claim 7, wherein the landline telephone is a landline corded telephone.
10. The system of claim 7, wherein the landline telephone is a landline cordless telephone.
11. The system of claim 10, wherein the one or more handsets further include cordless radio transceivers and antenna.
12. The system of claim 7, wherein the landline base station communicates with at least two headsets, one of which is used to receive incoming calls for the cellular telephone and to send outgoing calls on the behalf of the cellular telephone.
13. A landline telephone base station comprising:
  - an audio router configured to
    - send and receive audio signal communications with a BLUETOOTH wireless protocol stack and transcoder, and
    - send and receive audio signal communications with a cordless protocol stack and transcoder;
  - wherein the audio router is configured to couple, at least in part, one cellular telephone to the landline telephone base station.
14. The system of claim 13, further comprising a processor coupled to the audio router, the processor is configured to
  - send and receive data communications with the short-range wireless protocol stack and transcoder, and
  - send and receive data communications with the cordless protocol stack and transcoder.

15. A method for establishing a wireless communications between a cellular telephone and a landline telephone, the method comprising:

establishing a wireless communications link between the landline telephone and the cellular telephone when the cellular telephone is within a range of a transceiver of the landline telephone;

establishing an audio link between the cellular telephone and the landline telephone when the wireless communications link between the landline telephone and the cellular telephone is established;

receiving audio communications from a telephone handset of the landline telephone;

processing the audio communications according to a wireless communications protocol corresponding to the wireless transceiver of the cellular telephone; and

sending the processed audio communications to the cellular telephone via the audio link.

16. The method of claim 15, further comprising:

establishing a data link using Asynchronous Connectionless Link (ACL) connection between the cellular telephone and the landline telephone for supporting data exchanges between the cellular telephone and the landline telephone.

17. The method of claim 15, wherein the wireless communications link is a BLUETOOTH communications link.

18. The method of claim 15, wherein the cellular telephone and the landline telephone are both BLUETOOTH-enabled.

19. The method of claim 15, wherein the landline telephone comprises two transceiver, one of which is a cordless link transceiver for use in receiving/sending messages to at least one landline headset, and the other one of which is a BLUETOOTH transceiver for use in receiving/sending messages to the BLUETOOTH enabled cellular telephone.

20. The method of claim 15, wherein sending the processed audio communications to at least one of the cellular telephones via the audio link includes sending AT commands.

21. The method of claim 20, wherein the AT commands are sent using data packets over an ACL (Asynchronous Connectionless link) connection.

22. The method of claim 20, wherein the AT commands are sent using one of the audio packets, the data packets, and a combination of audio packets and data packets.

23. The method of claim 20, wherein the AT commands are sent using data packets over an audio (SCO) connection.

24. The method of claim 15, further comprising establishing a direct wireless communication link between the cellular telephone and a cordless handset that is communicating with a BLUETOOTH landline telephone base station when the cellular telephone is within a range of the landline telephone base station.